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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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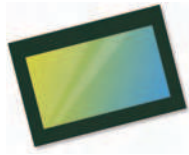
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# OV2735 1080p product brief



## High-Sensitivity 1080p HD OmniPixel3-HS™ Sensor for Mainstream Security Applications



available in  
a lead-free  
package

OmniVision's OV2735 is a high-performance image sensor that brings 1080p high-definition (HD) video capture to mainstream security and surveillance cameras. The OV2735 offers technical advancements such as support for low-power mode, stable image quality within operating temperatures ranging from 0°C to 60°C, and dramatically reduced power consumption. As such, the OV2735 offers security and surveillance camera OEMs an easy upgrade camera solution in the popular 1/2.7-inch optical format.

Built on OmniVision's proven OmniPixel3-HS™ pixel technology, the OV2735 captures full-resolution 1080p HD video at 30 frames per second (fps) and 720p video at 60 fps. The OV2735 also offers MIPI with parallel support and frame synchronization in a compact and power-efficient package.

Find out more at [www.ovt.com](http://www.ovt.com).



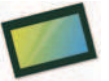
## Applications

- Security IPC
- Analog HD Video Cameras

## Product Features

- programmable controls:
  - gain
  - exposure
  - frame rate
  - image size
  - horizontal mirror
  - vertical flip
  - cropping
  - windowing
- automatic image control functions:
  - black level calibration (BLC)
- defective pixel correction (DPC)
- supports binning function
- digital video port (DVP) parallel output interface
- I2C control interface for register programming
- support for two lane MIPI interface (up to 420 Mbps)
- support for image sizes:
  - 1080p @ 30 fps
  - 720p @ 60 fps
  - VGA @ 60 fps
- support for black sun cancellation
- on-chip phase lock loop (PLL)
- support for low power mode

# OV2735



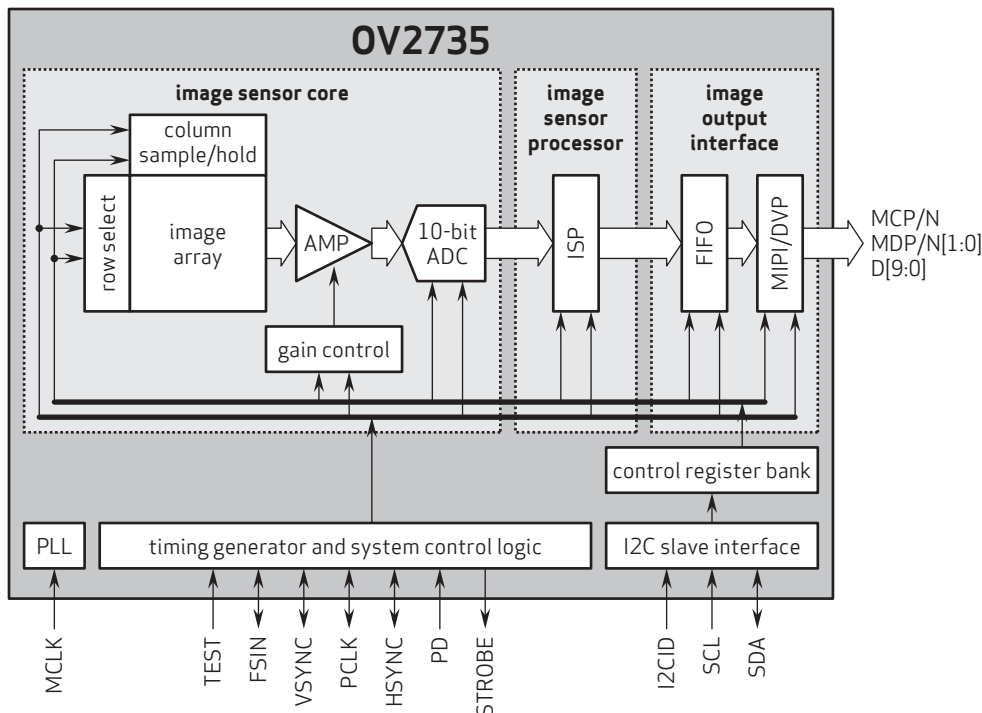
## Ordering Information

- OV02735-H66A-1B (color, lead-free) 66-pin CSP
- OV02735-H66H-1B (color, lead-free) 66-pin CSP

## Product Specifications

- active array size: 1920 x 1080
- power supply:
  - core: 1.7 - 1.9V (1.8V nominal)
  - analog: 2.6 - 3.0V (2.8V nominal)
  - I/O: 1.7 - 3.0V (1.8V nominal)
- power requirements:
  - active: 176 mW
- temperature range:
  - operating: -30°C to +85°C junction temperature
  - stable image: 0°C to +60°C junction temperature
- output interfaces:
  - two-lane MIPI / DVP parallel
- output formats: RAW10
- lens size: 1/2.7"
- lens chief ray angle: 1.2° linear
- input clock frequency: 6 - 27 MHz
- scan mode: progressive
- maximum image transfer rate:
  - 1080p: 30 fps
  - 720p: 60 fps
- sensitivity: 23 Ke-/Lux.sec
- shutter: rolling shutter
- max S/N ratio: 38.6 dB
- dynamic range: 72 dB @ 8x gain
- maximum exposure interval: 1328 t<sub>row</sub>
- pixel size: 3 μm x 3 μm
- image area: 5808 μm x 3288 μm
- package dimensions:
  - CSP: 6956 μm x 4765 μm

## Functional Block Diagram



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OmniVision